



ALPHALAB

Bench-top leak detector.



The AlphaLab is a bench-top leak tester dedicated to flexible packaging testing for the food, pet care and cosmetic Industries. It has been specifically designed for laboratories in Factories that have to follow stringent Quality Inspection procedures and processes like **ISO 22000 & HACCP**.

Current leak testing methods.

80% of Industrial Leak Detection devices are using pressure decay today. It is very effective to measure leaks for products that are rigid, whose shape does not change when put under pressure.

However, measuring precisely a leak by measuring pressure decay is only precise and reliable if the volume of the sample is not changing during the measurement, which is not the case for flexible packaging.

Flow measurement at a Constant Pressure is the only reliable method for measuring a leak in a flexible packaging. It follows DIN 55508-1 of 01/02/2018.

This is this method that has been selected to develop the **AlphaLab**, ensuring total precision and reliability.

AlphaLab main advantages:

- ◆ Measure leaks > 5 μm
- ◆ Data immediately available.
- ◆ Accurate analyzed results.
- ◆ Cost savings (the **AlphaLab** operates without consumables).
- ◆ **ISO 22000 & HACCP** compliance.
- ◆ **Modified Atmosphere Packaging** (MAP) packaging Control
- ◆ Brand protection and lasting taste for your products.
- ◆ Visualization of the size of the leak via a coupler connection.

Operating instructions:

Place a sample under the perforating tower, adjust the tower manually until it is in contact with the sample. Perforation starts automatically. There is no limit to the number of samples that can be tested.

Results are visible on the **AlphaLab** screen, these can be transferred instantly to a computer via a RS232 connection to study the results on a pivot table. These can also be visualised on a Gauss chart together with the pre-set parameters

Technical specification:

The **AlphaLab** consists of 2 separate units: an **AlphaTower** (patented perforating device) and an **AlphaBox** (leak testing unit). The **AlphaTower** and the **AlphaBox** are communicating via a PS/2 cable and a PU tubing.

1. AlphaTower:**Patented perforating device.**

OLED display 1,5".

Touch sensitive buttons for perforating depth.

Servo driven internal perforating thin conical stainless steel pointer.

Silicon bellows diameter: 15mm* (* other sizes / shapes: consult us).

Cantilever holder for free movement of tower.

2. AlphaBox:**Leak testing unit.**

Structure: steel and ABS.

Display: 3,5" resistive touch screen.

Internal air pump.

Alicat electronic pressure controller from U.S.A., 1000 mbar scale.

Alicat mass flow meter from U.S.A., 1000 sccm scale.

Microprocessor: embedded ATMEL2560, 16 Mhz.

Calibrated leak port.

Foot print: 260 x 250 mm Weight: 10 Kg.

3. Option:**Calibration CheckLab.**

This accessory allows you to compare the flow rate of your instrument against that of a calibrated leak.

If the flow rate of the **AlphaLab** at a given pressure is between the minimum and maximum limits, no further checks are needed, and you can continue to use your **AlphaLab**. If not, further investigation is required.

The **AlphaLab** is guaranteed 3 years.

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